

Claims

What is claimed is:

1. A semiconductor device comprising:

first and second spaced conductive lines;

a dielectric layer in a region which extends from said first conductive line to said second conductive line and is interposed between said first conductive line and said second conductive line; and

first, second, and third spaced tunnels within said dielectric layer in said region which extends from said first conductive line to said second conductive line and is interposed between said first conductive line and said second conductive line.

2. The semiconductor device of claim 1 further comprising:

said second tunnel interposed between said first and third tunnels; and

a cross-sectional area of said second tunnel and a cross-sectional area of each said conductive line, wherein said cross-sectional area of each said conductive line and said second tunnel are about equal.

3. The semiconductor device of claim 2 wherein said first and third tunnels each have a cross-sectional area, and said cross-sectional area of each of said first and third tunnels is less than said cross-sectional areas of each of said conductive lines and said second tunnel.

4. The semiconductor device of claim 2 further comprising said second tunnel in said dielectric layer having a generally square or rectangular shape.

5. The semiconductor device of claim 2 further comprising said void in said dielectric layer having a generally trapezoidal shape.
6. A semiconductor device comprising:
 - a semiconductor substrate assembly comprising a semiconductor wafer section;
 - first and second conductive lines having, in cross section, a width and a height;
 - a dielectric layer between said first and second conductive lines, said dielectric layer having a void therein, said void comprising a width and a height about the same as said width and said height of said first and second conductive lines.
7. The semiconductor device of claim 6 wherein said void is a tunnel having a length substantially longer than either of said width and said height of said void.
8. The semiconductor device of claim 6 further comprising said void in said dielectric layer having a generally square or rectangular shape.
9. The semiconductor device of claim 6 further comprising said void in said dielectric layer having a generally trapezoidal shape.
10. The semiconductor device of claim 6 further comprising said void in said dielectric layer being interposed between said first and second conductive lines.